Written Statement of

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OPENING

Mr. Chairman, Members of the Subcommittee, I would like to thank you for holding this hearing today on "Telecommuting: A 21st Century Solution to Traffic Jams and Terrorism" and for inviting the Telecommunications Industry Association and Hughes Network Systems to provide our perspectives for your consideration.

My name is Joslyn Read. I am here today in my role as a member of the Telecommunications Industry Association (TIA), and as Assistant Vice President for Regulatory Affairs for Hughes Network Systems.

TIA provides a forum for over 600 member companies, the manufacturers and suppliers of products, and services used in global communications. Many TIA members manufacture and supply products and services used in the deployment of the broadband infrastructure that enables a vast array of communications services, including telecommuting. Broadband access can be provided over a number of different technologies, including satellite, cable, fiber to the premises (FTTP), DSL, and various wireless technologies, all of which hold great promise and are in various stages of development and deployment. Although TIA companies are involved in all of these technologies, I am most familiar with satellite and will focus my remarks regarding telecommuting to the benefits that satellite broadband offers.

Hughes Network Systems is the global leader in providing broadband satellite networks and services for large enterprises, governments, small businesses, and consumers. To date, Hughes has shipped more than one million satellite broadband systems to customers in over 100 countries. Throughout the United States today, there are approximately 300,000 consumer and small business subscribers that are customers of HughesNet™ high-speed satellite Internet access, with new subscribers joining at approximately 10,000 per month. In addition there are over 200,000 large enterprises locations using Hughes satellite technology for day to day data networking. Hughes is headquartered in Germantown, Maryland.

Overview

Mr. Chairman, my testimony, simply put, is as follows. First, teleworking is critical to American productivity and as part of continuity of operations plans is critical to American readiness during emergencies. Second, satellite communications is an essential element to successful implementation of teleworking as it is the only communications vehicle that can reach anyone, anywhere, at any time. Third, government should support teleworking and do so in an inclusive manner that recognizes the unique contribution that satellite has and will continue to make in that effort.

Importance of Teleworking

Recent reports have estimated that 28 million Americans telecommute in one way or another, from working at home to working on the road with no office at all. "Teleworking" takes "telecommuting" a step further. The author of a recent study has defined teleworking as "an advanced form of telecommuting which goes beyond simply allowing employees to work from home or an alternative location a couple of days a week and instead enables them to work at any

time or place that allows them to successfully complete their work. In short, it means bringing the work to the worker instead of the worker to the work."[1]

The benefits of teleworking to organizational efficiency and long-term effectiveness – for both federal and non-federal enterprises - is being increasingly documented. Briefly, these benefits include:

1. Improvement in organizational resiliency and continuity of operations during security threats, natural disasters and health pandemics
2. Improvement in organizational and individual productivity
3. Reduction in traffic congestion, energy consumption and vehicular pollution
4. Reduction in enterprise facilities costs
5. Improvement in opportunities for disabled, rural and older workers
6. Improvement in employee satisfaction, motivation and retention

Broadband Connectivity Is Critical for Teleworking

Attaining the benefits of teleworking is only possible if teleworkers have access to a high-speed broadband communications – where they need to work.

High speed broadband services have been deployed to many areas of the United States using many technologies, but estimates of the number of homes without high-speed availability still range from 10-15 million U.S. homes. In its annual report on broadband deployment in April 2006,[2] the Federal Communications Commission (FCC) reported that for the twelve month period ending June 30, 2005, the number of broadband connections used by homes and small businesses for Internet access that exceed 200 kbps in at least one direction increased by 32% to almost 43 million lines. For the same period, the number of lines transmitting at speeds that exceed 200 kbps in both directions increased by 60% to nearly 38 million lines. The most widely reported technologies reported by the FCC's Zip Code measure were satellite (with subscribers reported in 86% of Zip Codes), asymmetric DSL (in 78% of Zip Codes), and cable modem (in 62% of Zip Codes).

High speed broadband services by satellite are reliable, scalable, and cost-effective. Satellite broadband network infrastructure serves rural, suburban and urban customers ubiquitously throughout the United States. Satellite service prices are distance-insensitive. Satellite broadband speeds today are very comparable to DSL offerings and in some cases can be superior.

As a result, satellite broadband is uniquely positioned to solve many of the teleworking needs of today.

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[1] See "Washington, D.C. Ranked Best City for Teleworking," Sperling's Best Places. March 30, 2006.

http://www.bestplaces.net/docs/studies/Telework06.aspx.

[2] See Federal Communications Commission, "High-Speed Services for Internet Access: Status as of June 30, 2005." Industry Analysis and Technology Division, Wireline Competition Bureau. April 2006.

Importance of Teleworking during States of Emergency

Teleworking plays a critical role in Continuity of Operations Planning (COOP) for both the federal government and non-federal enterprises. During emergencies, managers and workers will be able to maintain critical functionality from highly distributed home offices and alternate facilities. Teleworking by satellite provides an additional layer of vital diversity in communication modes to ensure continuity of operations and business.

Let me explain. Satellite networks are comprised of spacecraft orbiting thousands of miles above the earth using a small number of ground-based hub switching stations dispersed throughout the network service area (usually the continental United States and often beyond). This distributed national space-based network service architecture makes satellite networks extremely durable and reliable during manmade or natural emergencies.

Satellite communications have played a critical role during the response and recovery efforts resulting from the manmade disasters of September 11th, and the natural disasters we witnessed last year in this country and abroad. When the terrestrial Internet, telephone and broadcast networks went down, satellites remained on the job. Satellites connected emergency personnel and other first responders. Satellites reunited families and communities. Satellites maintained business and residential Internet connectivity for weeks until other damaged communications systems were being restored.

Satellite communications equal redundancy, ubiquity and resiliency.

Need for Government Support

For many employees within the Washington Metropolitan area and beyond to achieve the benefits of teleworking, a highly effective option is to utilize high-speed broadband services by satellite.

In May 2006, the General Accountability Office (GAO) found that for terrestrial broadband facilities, it is more costly to provide broadband services to areas with low population density and rugged terrain and that it also may be considerably more costly to serve locations that are a significant distance from a major city. As a result, broadband infrastructure has not been well deployed to many rural and even suburban parts of the country. The GAO also noted that because the cost of building land-based infrastructure is so high in some rural areas, satellite broadband technology may be the best for addressing a lack of broadband in those regions.

The federal government should provide economic support to encourage the take-up of broadband communications essential for teleworking and COOP contingencies. In May of this year, the U.S. General Services Administration's (GSA) "Telework Technology Cost Study" concluded that:

> "In order to telework, employees often leverage surplus and personally-owned equipment, and manage with limited access to agency systems. Accordingly, … basic services and technologies need to be provided to teleworkers. … Rather than cost being a barrier to

telework, significant cost savings and benefits can be realized from investing in telework solutions and from optimal expansion of their telework programs."

In April 2006, the GAO reported[3] to the Chairman of the House Committee on Government Reform that there was significantly more progress needed on federal agency COOP plans to designate alternate facilities, prepare personnel for unannounced relocation to these facilities, and on the use of telework in their continuity plans.

The federal government clearly and urgently needs to accelerate the realization of Continuity of Operation plans for working from diverse locations. Satellite broadband services constitutes a critical and often sole option for many workers in the Washington Metropolitan area to participate in emergency-based COOP preparedness as well as teleworking during non-emergency times. As the only truly diverse communications medium in the event of an emergency, satellite communications should be a requirement in any formal teleworking or COOP plan implemented by Government.

Conclusions and Recommendations

In conclusion, we fully endorse the steps already taken by the federal government to introduce teleworking programs for ongoing operations and emergency preparedness. We emphasize that high-speed broadband connections are critical to effective teleworking, and that broadband by satellite is one of the key high-speed technologies available to teleworkers everywhere throughout the National Capital Region – right now.

We recommend that:

1. Federal Government agencies accelerate the implementation of teleworking programs for all the reasons outlined above and by this panel.

2. In recognizing that teleworking brings enormous efficiencies and resiliency to federal missions, Congress and the individual agencies of the Federal Government define and expand its teleworking programs that include:
    a. Compensation to teleworkers for their monthly high-speed broadband services.
    b. Compensation to teleworkers for the broadband customer premises equipment needed to perform their online duties, particularly for those teleworkers that are involved in essential agency functions, and for those that reside in locations that are rural, remote, and are less able to travel into a centralized workplace.
    c. Tax credits for non-federal employers and employees who engage in teleworking programs.

Chairman and Members of the Subcommittee, I would like to thank you again for inviting the Telecommunications Industry Association and Hughes Network Systems to present our views at this hearing today.

[3] See General Accountability Office, "CONTINUITY OF OPERATIONS: Selected Agencies Could Improve Planning for Use of Alternate Facilities and Telework during Disruptions." GAO-06-713. May 2006.